Hitting the Nail on the Head: Keeping Cost Estimates on the Mark

Imagine you're sponsoring a Transportation Enhancements (TE) project involving the construction of a steel trestle pedestrian and bicycle bridge. After months of planning, the bridge is almost ready for construction, and all of a sudden the price of steel rises precipitously. Project costs are now inflated, and funds are getting short. "No problem," you think, "I'll just request additional TE funds from my state department of transportation, right?"

Don't count on it. While some states set aside TE funds to help project sponsors in case of unanticipated expenses, or "cost overruns," many states will not provide additional funds to sponsors under any circumstances. Some states, such as Missouri and Tennessee, will not provide additional funds but will allow the sponsor to reduce the scope of the project (e.g. reduce the length of a trail or the number of benches) to decrease the overall project cost. States may also allow the sponsor to apply for additional TE funds in the next year's funding cycle. This doesn't guarantee additional funds for the project, however, and may result in significant project delays.

States that do cover cost overruns usually do so within limits. Nevada, for example, will fund cost overruns up to $100,000. Like several other states, Nevada also requires sponsors to "overmatch" the supplemental funding award to demonstrate their continued commitment to the project.

The state of Indiana grants additional funds to the sponsor depending on the reason for the request. Unforeseen circumstances such as a rise in the price of raw materials are generally considered more legitimate justification for a cost increase than bureaucratic delays, sloppy initial estimates, or changes in the agreed-upon project plan.

Cost overruns are a serious problem whether or not they are covered by the state. They may cause delay in project implementation and, in the worst cases, project termination and recission of federal funds. Cost overruns create problems for a state's TE program, because states may be forced to delay funding for new or existing TE projects in order to help a troubled project. With so much at stake for the project and the state TE program as a whole, it's crucial that project sponsors give accurate cost estimates from the start.

So what throws project sponsors off when they make their estimates? Some costs can't be anticipated: rising prices in raw materials or labor, budget cuts, and nasty weather, to name a few. The cost estimate should reflect the best estimate of the factors shown in the box that may affect final project costs.

More commonly, cost overruns are the result of poor planning or inexperience. Some sponsors start off on the wrong foot by attempting to calculate project costs without the help of a certified professional in the appropriate field, such as an engineer or landscape architect. Some states, like Delaware for example, cope with this problem by offering to have experienced state staff develop the estimate for the local project sponsor.

The planning and engineering phases of project development are particularly problematic for inexperienced sponsors. They may be unaware of the rigor and expense required to complete the environmental review process, for example. Even if sponsors correctly calculate the cost of the review process, they may overlook the cost of its outcome. If contamination is discovered at a project site, the clean-up can be very expensive, depending on the intensity of contamination and the methods used to control it.

The process of acquiring property, or "right-of-way," for a project may also generate unexpected costs. Because property acquisition is regulated by the federal government, sponsors must follow a lengthy and formal process that may be complicated by any local opposition to the project. To control these unpredictable stages of the planning process, some states encourage or even require sponsors to complete the planning process before applying for TE funds.

Once planning is completed and construction starts, unexpected costs still may crop up.

Construction bids may come in higher than predicted. If the construction period takes longer than expected, contractors may charge overtime pay to meet the target date for project completion. Delays during any stage of the project development process, from planning to construction, may increase project costs because of inflation.

With so many possible pitfalls, developing an accurate cost estimate may seem like predicting the future with a crystal ball. However, most TE project sponsors manage to develop an accurate cost estimate and complete projects on time and on budget. By keeping a few tips in mind, tommorow's TE project sponsors will make cost overruns a thing of the past.

Tips for Developing an Accurate Cost Estimate

- Secure local funding commitments before submitting your application
- Get a certified professional in the appropriate field to develop the cost estimate
- Adjust cost estimates for inflation over the expected project timeline
- Develop realistic project completion dates to avoid paying overtime to contractors
- Quickly proceed to project development after being notified of your TE award
- Be aware of the time and expense required for environmental review
- Be prepared to finance DOT costs for administering the project
- Be aware of wage requirements associated with federal-aid construction projects
- If possible, secure the necessary rights-of-way before applying for funds